From: Becher, Kent To: Miller, Garya

Cc: Hayter, Earl J ERDC-RDE-EL-MS; Paul R Schroeder (Paul.R.Schroeder@erdc.dren.mil); Sanchez, Carlos; Kent

Subject: Re: SJ dive

Date: Tuesday, October 21, 2014 10:11:26 AM

Thanks Gary. The doppler would only take a couple of hours if that on the site depending on how many cross sections you would want to complete at the site. The UAV can collect temperature, DO, conductance, pH, and turbidity. I was thinking that if you are concerned about changes in the cap below water surface that the side scanning sonar (which is globally positioned) could be used to give you a baseline. If a major event happens then another run by the cap could indicate areas of change below the water surface. In addition, you would get bathymetry with the UAV.

I don't want to give you an estimate without involving Mike Lee out of the Houston office, but for doppler I would guess 2K or less. I know they are wanting to get the UAV in the water, so they might be willing to do a deal with that instrument.

Let me know when you want to chat and we will get Mike and all of us on the phone.

Thanks.

Kent Becher Hydrologist (QW Specialist (Studies)) USGS Technical Liaison EPA Region 6 Superfund Division USGS North Texas Water Science Center 2775 Alta Mesa Blvd. Fort Worth, TX 76133 (817) 263-9545 ext. 204 (817) 253-0356 (cell)

On Tue, Oct 21, 2014 at 9:52 AM, Miller, Garyg < Miller. Garyg@epa.gov > wrote:

Thanks Kent; I've asked USACE for some input on what would be helpful for their study so expect to get that to you soon; but for now, do you have a cost estimate to do the doppler velocity & bathymetry – assuming 1 or 2 days in the field? Also, what are the uses for the side scan sonar, and what types of water quality parameters can they do?

Thanks,

Gary Miller

EPA Remedial Project Manager

214-665-8318



9563181

miller.garyg@epa.gov

From: Becher, Kent [mailto:kdbecher@usgs.gov]
Sent: Monday, October 20, 2014 11:46 AM

To: Miller, Garyg Cc: Kent Becher Subject: SJ dive

Hi Gary,

I have talked to Houston about using some doppler at SJ to determine velocities. They said they would be glad to help out. Also, I have another potential suggestion for the site. We actually have a UAV in Houston that can do water quality, side scanning sonar, and bathymetry. I think this could be a good tool to look at changes in the cap below the water level. I did chat with Val a bit last week about this site. He said he was going to meet with the dive team to decide what they needed from us.

Anyhow, we are willing to meet with you anytime to discuss in more detail. There is about 7K (gross) left in the SJ account, so we are fine with funding at this point.

Thanks.

Kent Becher

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